## Docket No. 217 - Development and Management Plan Inspection

Northeast Utilities Service Company Certificate of Environmental Compatibility and Public Need for the construction of a 345-kV electric transmission line and reconstruction of an existing 115-kV electric transmission line between Connecticut Light and Power Company's Plumtree Substation in Bethel, through the towns of Redding, Weston, and Wilton, and to the Norwalk Substation in Norwalk, Connecticut.

**Date:** January 26, 2006

**Inspector:** Don Ukers

Location: Overhead Line (Composite 345kV and 115kV Gallows Hill to Archers Lane) and

(345kV H-Frame Hoyts Hill to Gallows Hill)

Storm/

**Rain Event:** Approximately 0.79" of mixed precipitation (in the form of snow and rain)

fell on 1/23 as reported by NOAA.

Areas of Inspection	Observation	Recommended Action
Access Roads and Adjacent Roadways	- The Composite ROW work is accessible from Gallows Hill Road by an existing trail path with a swing gate, an	- With freezing and thawing periods, additional measures for stability should be considered if there are still
Composite	approved access path in from the east of the ROW, an access road passing through the Archers Lane substation, and an area cleared from the station to the ROW. 1/26/06	access needs. If any areas still have ruts at the end of the work, it will have to be regraded to return to original conditions. 12/8-1/26/06
	- Water levels at the 2 <sup>nd</sup> wetland crossing on the access road had receded slightly by this visit. A new load of stone was installed and haybales and silt fence were securely installed. 1/26/06	-The additional stone and reinforced controls will likely reduce turbidity here unless water levels rise to previous conditions again. 1/26/06.
	- See erosion control section for more details. 1/26/06	
345kV H-Frame	- Construction of access roads continues in the vicinity of Hoyts Hill. The wetland crossings between here and Chestnut Ridge remain well in place. 1/26/06	-Some additional sections of silt fence were installed adjacent to the mats as recommended. Continue to maintain as needed. 1/26/06
	-Mats were placed at the final wetland crossing at the Bethel	- The crossings are well constructed and the larger stream was flowing clear.

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	Reservoir section. The stream/wetland crossings continue to have mats well in place. 1/26/06  -Sediment tracking was not as prevalent along Chestnut Ridge Rd. from the ROW as previously noted. 1/26/06	Watch for creation of any ruts as they will need to be restored to original condition. Continue to provide/extend erosion controls on the approach to the mats as necessary to prevent sedimentation.1/4-1/26/06  - Continue to monitor and install additional stone here at the access point and sweep the
Foundation construction  Composite	-Sections of several old wooden structures had been removed at the time. Lines were also being taken down. 1/26/06	street as necessary. 1/26/06  -None at this time. 1/26/06
	- Erosion controls were being repaired at the structure foundation adjacent to Archers Lane to control the sediment piled here.1/26/06	- Continue to maintain. 1/26/06
345kV H-Frame	-Excavations were noted for wooden pole installation in the Bethel Reservoir section. A concrete foundation was installed off Nashville Rd. Poles were also being stored here. 1/26/06	- None at this time.1/26/06
	- In the Chestnut Ridge/Hoyts Hill section, drilling excavations for structures continued. 1/26/05	-Large amounts of sediment were still present at proposed structure #6. See erosion control section for recommendations. 1/26/05
Erosion and Sediment Controls (includes inspection within 24 hours of a storm event)  Composite	- Water levels had receded slightly at the 2 <sup>nd</sup> wetland crossing along the Archers Lane access road. The controls were securely installed and more haybales had been added. New stone was also installed within the road to raise the crossing. 1/26/06.	-These additional controls will likely help to reduce new sediment loads. Water in the wetlands is still somewhat turbid from past flooding and run-off. Site analysis is ongoing to evaluate the water issues. 1/26/06
	- The 1 <sup>st</sup> wetland crossing,	- Solutions to prevent sedimentation and turbidity in

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Erosion controls continued	immediately within the Archers Lane site before the access road opens into the ROW continues to have sedimentation/turbidity issues from road run-off. Sediment ranges from a thin layer on the leaves to several inches thick. 1/26/06 - The washout spots along the silt fence were all well repaired but accumulated sediment remains in and adjacent to the wetlands.	the ponded water here need to be investigated and implemented. Cleaning out the sediment in the stone may help. 1/4-1/26/06 -Potential run-off issues from the slopes of the transition station are also being evaluated. 1/19-1/26/06 - In areas where sediment is substantial and feasibly removable, contractors should shovel it out carefully by hand. 1/26/06
	- The drainage pipe from the station also resulted in sediment accumulation at the 2 <sup>nd</sup> crossing area. 1/26/06	- Contractors at the station will be asked to install haybales in the drainage swale when they are dewatering. 1/26/06
	- The 2 <sup>nd</sup> structure in from Gallows Hill has a bare soil/boulder slope adjacent to the wetland with controls still well in place. 11/23-1/26/06.	- The area should be regraded, to final contours and restored when feasible. 12/1-1/26/06
345kV H-Frame	- The stockpile from structure #9 foundation installation was still present. Silt fence was repaired. 1/26/06	- Remove the stockpile when feasible. 1/26/06  -Continue to place controls at
	- Mats for stream/wetland crossings are well installed throughout this section but they are getting increasingly muddy. Silt fence sections were added to the mat between	all four "corners" of the approach to the mats and crossings. This was needed at the final crossing in the Bethel Reservoir section to prevent sedimentation. 1/26/06
	pole #6-7 as recommended. 1/26/06	- Strengthen and maintain the silt fence here and pull back the soil ASAP since the
	- A large amount of sediment resulted from excavation for structure #6. The outer silt fence barrier was still strained	sediment and controls are already in a wetland area. 1/19-1/26/06
	due to the sediment against it. 1/19-1/26/06	-Although dewatering was not noted at this time, the controls here were not improved and
	- Dewatering discharge here last week was sent to a small area of controls in an upland	sediment remained in the woods. Install erosion controls at the base of slope to prevent

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	which was over-whelmed by the sediment. It tracked through the woods to a wetland at the base of slope. 1/19-1/26/06	sedimentation or remove the majority of the sediment from the woods. 1/26/06 - Most of the soil was removed or spread out and controls were installed at the
	- Stockpiles at structure #8 had been present as a result of excavation for the foundation. 1/19-1/26/06  -Silt fence was recommended at the structure where clearing	base of the area before the slope. 1/26/06  -Install fence as necessary.  Work had not yet reached this structure. 1/12-1/26/06
	and the access road had ceased in this portion of the ROW. 1/12-1/26/06	
Inland Wetland and Watercourse encroachment and mitigation	-The D&M plan approved stone on geotextile fabric at the wetland crossings had worked well, but at the two areas near Archers Lane, turbidity issues have been	- As the access is considered temporary, the stone will be removed when final work ends so the wetlands can be restored. Erosion controls were much improved at the
Composite	present. Run-off from the road and the drainage pipe had led to sedimentation. 1/26/06  - The rocks at the 1 <sup>st</sup> crossing remain clogged with sediment and noticeable deposits were in the wetland. 1/4-1/26/06	second crossing. 1/26/06 Clean stone was also added to the second crossing. The 1 <sup>st</sup> crossing could also use some clean stone. 1/4-1/26/06
345kV H-Frame	-Crossings were well installed and water remained clear, but mats are getting muddy. 1/26/06.	-See any recommendation in erosion control section.1/4-1/26/06
	- Use caution in removing trees from wetland areas or adjacent to streams. Avoid creating ruts when skidding them out. 1/19-1/26/06	- If channelization is noted as a result during the spring, the previously created ruts should be repaired if possible. 1/12-1/26/06
	- At the excavation for proposed structure #6, a large amount of mud was contained within the silt fence but it was already within the wetland.  1/19-1/26/06  - Dewatering at this location led to mud tracking down	- Lack of workspace is an issue here but the erosion controls and mud were within the wetland. It should be pulled back as soon as possible and controls reinstalled closer to the pole. 1/19-1/26/06

Areas of Inspection	Observation	Recommended Action
	slope to the edge of a wetland. 1/19-1/26/06	-Further controls are needed to prevent more serious sedimentation. See erosion control section for details. 1/19-1/26/06
State species of concern, threatened and endangered species	- The composite portion of overhead work includes statelisted turtle habitat area. 9/15-1/26/06.	-Turtles would no longer be active at this time of year. 1/26/06
	-The Eastern box turtle has not been observed since the first sighting and are likely hibernating. 1/26/06.	
Vegetative clearing limits (including trees to save or danger trees noted)	- Clearing continues for the H-frame section. Chips remain as well as stockpiles of larger trees. They may be utilized by landowners. 12/22-1/26/06  - Chips continue to be spread out on the ROW and on the	-Keep clearing to what is necessary. The D&M plan states low growing shrubs can remain. 12/22-1/26/06 -Efforts to retain mountain laurel and other shrubs were noted. 1/4-1/26/06
	approach to the mats but were not placed in wetlands. 1/19-1/26/06  - Trees are also being cleared adjacent to streams and wetlands to expand the ROW. 1/12-1/26/06	- Chips spread on the ROW should not be to a depth of more than 3" by the time the growing season is about to begin. 1/4-1/26/06 - Stumps will remain and trees should be felled toward the mats to avoid ruts in the stream. 1/12-1/26/06
Dewatering	- Dewatering was needed at the excavation for structure #6 last week. Amounts of water and sediment overwhelmed the few haybales and silt fence that had been placed and tracked down slope to a wetland at the base. 1/19-1/26/06 - Active dewatering was not noted at this structure this week. 1/26/06	- Release water to the ground only in well vegetated areas if it will not reach any resource areas. Otherwise use a filter bag or containment of some kind. 1/26/06
Blasting	-No blasting has been necessary at this time on the ROW. 1/26/06.	-None at this time. 1/26/06.
Spills and Material Storage	- No drips or leaks were noted under any of the vehicles this	- Continue to keep all vehicles maintained well (i.e. no apparent fluid leaks) if they

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	week. 1/26/06	will be used or stored on site - Keep adequately size fuel kits for worst case scenarios Report spills immediately, even if they are being controlled Take care not to get carried away and to be vigilant when refueling. Avoid refueling in the areas near the wetlands. Use proper storage for all materials.
Additional Observations		

Next likely scheduled	
inspection:	Thursday, February 2, 2006

I have personally examined and am familiar with the information submitted in this document and all attachments and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statements made in this document or its attachments may be punishable as a criminal offense in accordance with Section 22a-6 under Section 53a-157 of the Connecticut General Statutes.

Inspector's Signature: Diana Walden for Don Ukers	Inspector's Signature:	Diana Walden for Don Ukers
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(Composite Section): Photo shows a view of the 2<sup>nd</sup> crossing past Archers Lane. Water levels have receded slightly but new stone was also placed in the crossing. Haybales were installed along the silt fence and controls were improved. 1/26/06





Photo on the left shows the first wetland crossing along the ROW access road where sediment from run-off has settled within the wetland. Solutions to improving the erosion controls here are needed. Photo on the right shows the view to the station from the ROW. 1/26/06





Photo on the left shows the 1st structure in from Gallows Hill with cable being released from the old pole.  $(345kV\ H\text{-frame})$  Photo on the left shows a stockpile with controls installed on the Bethel Reservoir stretch. 1/26/06



345kV (H-Frame Section): Photo shows a wetland crossing within the ROW in the Bethel Reservoir section. With the soil disturbance, erosion controls have to be placed on the approach to the mat along all "four corners" to keep sedimentation to the wetlands. 1/26/06





Photo on the left shows the excavation for a wooden pole installation. Photo on the right shows a foundation in place off Nashville Rd. 1/26/06





Both photos show a view of the wetland crossing between structures 6 and 7 on the Chestnut Ridge to Hoyts Hill section. Erosion controls have been installed at the  $4^{th}$  corner as recommended. Make sure all controls remain maintained and extended to the mat. 1/26/06





Photo on the left is a view of some of the wooden poles being stored along the ROW. Photo on the right shows active drilling for structure foundations in this section. 1/26/06



Photo shows the extensive soil resulting from the excavation at proposed structure #6. The soil still needs to be pulled back and removed from the wetlands. 1/26/06